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DANG, KET D				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/596,391

Applicant(s)

ALBER ET AL.

Examiner

KET D. DANG

Art Unit

3742

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 27, 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI.08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Interval Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This office action is responsive to the amendment filed on August 27, 2009. As directed by the amendment: claims 1-2, 4-6 have been amended and claims 9-11 have been added. Thus, claims 1-2, 4-6, and 9-11 are presently pending in this application.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in Germany Patent Application No. 103 57 891.9, filed on December 11, 2003.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 5, the new limitation "said first receiving space being in communication with said second receiving space to define a metal sheet receiving space", there is no

communication between the first receiving space and the second receiving space are defined in specification or how they are being communicated with each other.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding independent claim 1, the phrase "preferably" at line 1 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). "billets" is an article which is formed into a sheet. There are insufficient antecedent basis for "the contact line" and "the weld seam" limitations in the claim at line 4. The phrase "said weld seam along said contact line" at line 6 is not clear because earlier limitation was the contact line or the weld seam. The limitations "tension rollers" at line 7 and "tension rollers" at line 9 in the claim, there are insufficient antecedent basis for this limitations. It is unclear and indefinite to the relationship between these "tension rollers" and "tension rollers" at lines 4-5 and to whether they are the same or different. Further clarification is required to either further differentiate (tension rollers) or provide proper antecedent basis. The phrase "and/or" at line 8 renders the claim indefinite per se. The limitation "one of said tension rollers" at line 11 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "one of

said tension rollers" and "tension rollers" at line 9 and to whether they are the same or different. Further clarification is required to either further differentiate (one of said tension rollers) or provide proper antecedent basis. The phrase "a thickness jump" at line 12 is not a clear description.

Claim 2 recites the limitation "at least one of said tension rollers" at lines 1-2 in the claim. There is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "at least one of said tension rollers" and "tension rollers" at lines 4-5 and to whether they are the same or different. Further clarification is required to either further differentiate (at least one of said tension rollers) or provide proper antecedent basis. The phrase "and/or" at line 3 renders the claim indefinite per se.

In claim 3, there is insufficient antecedent basis for "the height of another" in the claim at line 2. Furthermore, the phrase "the height of one of said tension rollers" at lines 1-2 and "the height of another" render the claim indefinite because It is unclear and indefinite to the relationship between "the top tension rollers" and/or "the bottom tension rollers" and to whether they are the same or different. Further clarification is required to either further differentiate (the height of one of said tension rollers or the height of another) or provide proper antecedent basis.

In claim 4, the phrase "preferably" at line 1 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). "billets" is an article which is formed into a sheet. There are insufficient antecedent basis for "said metal sheets" limitation at line 1 and "said weld

seam" limitation at lines 5-6 in the claim. The limitation "tension rollers" at line 8 in the claim, there is insufficient antecedent basis for these limitations. It is unclear and indefinite to the relationship between these "tension rollers" and "tension rollers arranged ... above and below" at lines 5-6 and to whether they are the same or different. Further clarification is required to either further differentiate (tension rollers) or provide proper antecedent basis. The phrase "and/or" at line 9 renders the claim indefinite per se. The limitation "at least one of said tension rollers" at line 10 in the claim, there is insufficient antecedent basis for this limitations. It is unclear and indefinite to the relationship between these "at least one of said tension rollers" and "tension rollers arranged ... above and below" at lines 5-6 and to whether they are the same or different. Further clarification is required to either further differentiate (at least one of said tension rollers) or provide proper antecedent basis. The limitation "a height" at line 12 renders the claim indefinite. It is unclear for whether this height is the same as the one recited at line 9 or at line 11. If it is so, then "a" should be replaced with "the" or "said". If it is not, then essential structural cooperative relationships between the two are suggested. The phrase "a thickness jump" at line 12 is not a clear description.

In claim 5, the phrase "and/or" at line 6 renders the claim indefinite per se. The limitation "one of said lower tension rollers" at lines 7-8, lines 9-10, lines 15-16, and line 21 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "one of said lower tension rollers" and "lower tension rollers" at line 7 and to whether they are the same, different or which one. Further clarification is required to either further differentiate (one of said lower tension

rollers) or provide proper antecedent basis. There is insufficient antecedent basis for "the weld seam" limitation at line 8 in the claim. The limitation "one of said upper tension rollers" at lines 9-10 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "one of said upper tension rollers" and "upper tension rollers" at line 5 and to whether they are the same, different or which one. Further clarification is required to either further differentiate (one of said upper tension rollers) or provide proper antecedent basis. The limitation "a metal sheet" at line 12 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "a metal sheet" and "metal sheets" at line 1 or "a first metal sheet and a second metal sheet" at line 3 and to whether they are the same, different or which one. Further clarification is required to either further differentiate (a metal sheet) or provide proper antecedent basis. Furthermore, the limitation "a thickness of one of said first metal sheet" at lines 17-18 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "a thickness of one of said first metal sheet" and "a first metal sheet" at line 3 and to whether they are the same or different. Further clarification is required to either further differentiate (a first metal sheet) or provide proper antecedent basis.

In claim 6, the limitation "a height" at line 4 renders the claim indefinite. It is unclear for whether this height is the same as the one recited in claim 5 at line 15. If it is so, then "a" should be replaced with "the" or "said". If it is not, then essential structural cooperative relationships between the two are suggested. Furthermore, the

limitation "one of said lower tension rollers" at lines 4-7 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "one of said lower tension rollers" and "lower tension rollers" at line 7 in claim 5 and to whether they are the same, different or which one. Further clarification is required to either further differentiate (one of said lower tension rollers) or provide proper antecedent basis.

In claim 7, the limitation "one of said lower tension rollers" at line 2 and lines 4-5 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "one of said lower tension rollers" and "lower tension rollers" at line 7 in claim 5 and to whether they are the same, different or which one. Further clarification is required to either further differentiate (one of said lower tension rollers) or provide proper antecedent basis. The phrase "and/or" at line 3 renders the claim indefinite per se. The phrase "corresponding metal sheet" at line 4 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "corresponding metal sheet" and "metal sheets" at line 1 or "a first metal sheet and a second metal sheet" at line 3 in claim 5 and to whether they are the same, different or which one. Further clarification is required to either further differentiate (corresponding metal sheet) or provide proper antecedent basis.

In claim 8, the limitation "one of said lower tension rollers" at lines 2-3 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "one of said lower tension rollers" and "lower

tension rollers" at line 7 in claim 5 and to whether they are the same, different or which one. Further clarification is required to either further differentiate (one of said lower tension rollers) or provide proper antecedent basis.

In claim 9, the limitation "one of said lower tension rollers" at lines 1-2 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "one of said lower tension rollers" and "lower tension rollers" at line 7 in claim 5 and to whether they are the same, different or which one. Further clarification is required to either further differentiate (one of said lower tension rollers) or provide proper antecedent basis.

In claim 10, the limitation "one of said tension rollers" at lines 1-3 in the claim, there is insufficient antecedent basis for this limitation in the claim. It is unclear and indefinite to the relationship between "one of said tension rollers" and "tension rollers" at line 4 in claim 1 and to whether they are the same, different or which one. Further clarification is required to either further differentiate (one of said tension rollers) or provide proper antecedent basis.

In claim 11, the phrase "another one of said tension rollers" at lines 1-2 and the same phrase "another one of said tension rollers" at line 2 in the same claim render the claim indefinite because examiner does not know which one is another one of said tension rollers.

In general, the claims are replete with such 35 U.S.C. 112, second paragraph issues. The above notes are exemplary with respect to all of the 35 U.S.C. 112, second paragraph rejections present in the instant case, **all claims must be carefully**

reviewed and appropriate corrections should be made in response to this rejection.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al. (US 7307235 B2) in view of Strum et al. (US 4,872,940) and Locke (US 3824368).

Regarding claims 1-2 and 10, Miyamoto et al. disclose a method for butt welding metal sheets (Abstract), preferably strips of metal sheet of differing thickness, the method comprising: providing relative motion between a laser beam and metal sheets 1/2 (fig. 2) along the contact line 1A/2A (fig. 2) between metal sheets or the weld seam to be prepared with tension rollers 3/4 (fig.2) arranged in pairs above 3A/3B (fig. 2) and below 4A/4B (fig. 2) metal sheets at spaced location from one another and next to weld seam along contact line of metal sheets 1/2(fig. 2) or weld seam to be prepared (col. 10, lines 30-59), wherein tension rollers 3/4 (fig.3) include tension rollers 3A/3B (fig. 2) arranged above and below metal sheets that are movable in height (see figures 2-11; col. 10, lines 1-20).

With respect to claim 3, Miyamoto et al. disclose wherein the height of one of tension rollers is changed and the height of another tension roller is fixed during the ongoing welding operation (col. 10, lines 49-59).

With respect to claims 4 and 11, Miyamoto et al. disclose a device for butt welding said metal sheets (abstract), preferably metal sheet strips 1/2(fig.2) of differing thickness for carrying out the welding method, the device comprising: tension rollers arranged in pairs at spaced locations from one another next to said weld seam above 3A/3B (fig. 2) and below 4A/4B (fig. 2) said metal sheets allowing relative motion between said laser beam , and the metal sheets along a contact line1A/2A (fig. 2) between the metal sheets to be prepared (col. 10, lines 30-59), and said tension rollers arranged above and below said metal sheets that are movable in height (see figures 2-11; col. 10, lines 1-20).

With respect to claims 5 and 9, Miyamoto et al. disclose a method for butt welding metal sheets, the method comprising: providing a first metal sheet 1 (fig. 2) and a second metal sheet 2 (fig.); providing upper tension rollers 3A/3B (fig. 2) and lower tension rollers arranged above and below the metal sheets so as to be movable in height (col. 10, lines 1-20); one of said upper tension rollers 3B (fig. 2) and said one of said lower tension rollers 4B (fig. 2) defining a first receiving space (see figure 2 for space between top and bottom rollers), another one of said upper tension rollers 3A (fig.) and another one of said lower tension rollers 4A (fig.) defining a second receiving space (see figure 2 for space between top and bottom rollers), said first receiving space being in communication with said second receiving space to define a metal sheet

receiving space (col. 10, lines 30-48); feeding said first metal sheet 1 (fig. 2) and said second metal sheet 2 (fig. 2) through said metal sheet receiving space such that said first metal sheet abuts said second metal sheet (col. 10, lines 1-20); changing a height of said one of said lower tension rollers 4B (fig. 2) such that said one of said lower tension rollers 4A (fig. 2) alters a dimension of said first receiving space (see figure 2), said first receiving space corresponding to a thickness of one of said first metal sheet 1 (fig. 2) and said second metal sheet 2 (fig. 2), said second receiving space corresponding to a thickness of another of said first metal sheet and said second metal sheet (abstract; col. 2, lines 7-30; see figures 2-11 for receiving spaces of different metal sheet thickness; col. 10, lines 1-20); welding said first metal sheet 1 (fig. 2) to said second metal sheet 2 (fig. 2) while changing said height of said one of said lower tension rollers to form a weld seam, said first metal sheet having a first metal sheet thickness in an area of said weld seam, said second metal sheet having a second metal sheet thickness in said area of said weld seam, said first metal sheet thickness being different from said second metal thickness to define a thickness lump in said area of said weld seam (col. 2, lines 7-30; col. 10, lines 1-20).

Miyamoto et al. disclose all of the limitations of the claimed invention as previously set forth, except for a laser beam, and utilizing a laser beam welding configuration instead of a resistance welding configuration.

However, a laser beam is known in the art. Strum et al., for example, teach a laser beam 25 (fig. 3). Similarly, Locke further teaches utilizing the method of laser beam welding configuration instead of a resistance welding configuration (col. 1, lines 5

- col. 2, 12). It would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Miyamoto with a laser beam welding of Strum, since as evidence by Locke, in order to focus in small holes or area of the workpiece and also make a strong joint between workpiece with less grain growth in the metal surrounding the well area and no heat treatment of the workpiece is necessary (col. 1, lines 49 – col. 2, lines 12 of Locke).

9. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al. (US 7307235 B2) in view of Strum et al. (US 4,872,940), Locke (US 3824368), as applied to claims 1-5 and 9-11 above, and further in view of Geiermann (US 5131581).

11. Regarding claims 6-8, Miyamoto et al. in view of Strum and Locke disclose all of the limitations of the claimed invention, as previously set forth, except for height can be adjusted and fixed position below the metal sheet.

However, height can be adjusted and fixed position below the metal sheet is known in the art. Geiermann, for example, teaches height can be adjusted and fixed position below the metal sheet (col. 5, lines 48-58; col. 10, lines 58 – col. 11, lines 4). It is known in the art that such a configuration provides a flexibility to adjust height from either top or bottom of the metal sheet as designed. It would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Miyamoto and Strum with adjustable in height below the metal sheet of Geiermann in order to provide a flexibility to adjust height from either top or bottom of the metal sheet as designed.

12. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strum et al. (US 4,872,940) in view of Miyamoto et al. (US 7307235 B2).

13. Regarding claims 1-3, Strum et al. disclose a method for butt welding metal sheets (Abstract), preferably strips of metal sheet or steel sheet billets of differing thickness, the method comprising: providing relative motion between a laser beam 25 (fig. 1) (Abstract) and metal sheets 1/2 (fig. 3) along the contact line between metal sheets or the weld seam to be prepared with tension rollers 3/4 (fig.1) arranged in pairs above 3 (fig. 1) and below 4 (fig. 1) metal sheets at spaced location from one another and next to weld seam along contact line of metal sheets or weld seam to be prepared (col. 1, lines 7-12), wherein tension rollers 3/4 (fig.1) include tension rollers 3 (fig. 1) arranged above metal sheets that are movable in height (col. 2, lines 13-28); and wherein tension rollers include tension rollers 4 (fig. 1) arranged below metal sheets including a tension roller on one side of the weld seam that is adjusted in height (col. 2, lines 13-28).

With respect to claim 2, Strum discloses wherein at least one of said tension rollers arranged below said metal sheets is adjusted in height as a function of the thickness and/or the necessary height position of corresponding metal sheet (col. 2, lines 24-27).

With respect to claim 3, Strum discloses wherein the height of one of tension rollers is changed and the height of another tension roller is fixed during the ongoing welding operation (col. 3, lines 25-37).

With respect to claim 4, Strum et al. disclose a device for butt welding (Abstract) metal sheets, preferably metal sheet strips 1/2 (fig. 3) or steel sheet billets of differing thickness for carrying out the welding method, the device comprising: a laser beam 25 (fig. 3); and tension rollers 3/4 (fig. 1) arranged in pairs at spaced locations from one another next to weld seam above and below metal sheets allowing relative motion between laser beam and the metal sheets 1/2 (fig. 3) along a contact line between the metal sheets or a weld seam to be prepared (col. 1, lines 7-12); and tension rollers including tension rollers 3 (fig. 1) arranged above metal sheets that are movable in height (col. 2, lines 13-28); and including at least one of tension rollers 4 (fig. 1) arranged below metal sheets, said at least one of said tension rollers arranged on a bearing that is adjustable in height on a vertical guide rail (col. 2, lines 13-28); wherein a height of said at least one of said tension rollers 3 (fig. 1) is changed during a welding operation such that a thickness lump is provided along a length of said weld seam, said thickness lump being defined between an upper side of said metal sheets and a lower side of said metal sheets (col. 2, lines 13-59; col. 3, lines 21-37).

Regarding claim 5, Strum et al. disclose a method for butt welding metal sheets (Abstract), the method comprising: providing a first metal sheet 1 (fig. 3) and a second metal sheet 2 (fig. 3); providing a laser beam 25 (fig. 3) (col. 1, lines 60-61); providing upper tension rollers 3 (fig. 1) and supported above the metal sheets so as to be movable in height (col. 2, lines 13-18); providing lower tension rollers 4 (fig. 1) arranged below the metal sheets with one of lower tension rollers being on one side of the weld seam and being adjustably mounted to be adjusted in height (col. 2, lines 13-18).

With respect to claims 6 and 9-11, Strum et al. disclose subsequent to step of adjusting the height, fixing a height position of one of lower tension rollers adjustably mounted on one side of the weld seam for butt welding said first metal sheet 1 (fig. 3) and said second metal sheet 2 (fig. 3), wherein another one of said lower tension rollers 4 (fig. 1) is in a fixed position, said another of said lower tension rollers not moving during welding of said first metal sheet and said second metal sheet (col. 3, lines 25-37).

With respect to claim 7, Strum et al. disclose wherein step of adjusting the height includes adjusting the height of one of lower tension rollers adjustably mounted on one side of the weld seam as a function of the thickness (col. 2, lines 24-28) and/or the necessary height position of corresponding metal sheet which one of said lower tension rollers adjustably mounted on one side of the weld seam is in contact (col. 3, lines 9-16, 34-37; col. 4, lines 22-29);.

With respect to claim 8, Strum et al. disclose and wherein the height of said one of lower tension rollers adjustably mounted on one side of the weld seam is adjusted while maintaining fixed the height position of another of lower tension rollers (col. 3, lines 25-37).

Strum discloses all of the limitations of the claimed invention as previously set forth, except for changing height of one of said lower tension rollers and said first receiving space being in communication with said second receiving space to define a metal sheet receiving space.

However, changing height of one of said lower tension rollers is known the art. It is known in the art that such a configuration provides a flexibility to adjust height from either top or bottom of the metal sheet as designed. Miyamoto et al. also teaches said first receiving space being in communication with said second receiving space to define a metal sheet receiving space (col. 10, lines 30-48). Miyamoto further teaches such a configuration provides a means for adjusting the rollers up and down at the position where the sheet members are inserting into the opening between rollers (col. 10, lines 1-20). It would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Strum with changing height of one of said lower tension rollers and communication between the first receiving space and the second receiving space to define a metal sheet receiving space of Strum in order to determine a space between the upper and lower tension rollers.

Response to Amendments/Arguments

14. Applicant's Amendments/arguments with respect to claims 1, 4, and 5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KET D. DANG whose telephone number is (571) 270-7827. The examiner can normally be reached on Monday - Friday, 7:30 - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Tu can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KET D DANG/
Examiner, Art Unit 3742